WHAT IS CLAIMED IS:

1. A patch image preparation method for forming a patch image to be used for generating image processing data, wherein said patch image includes plural patches relating to a same color, and said plural patches of the same color are arranged so as to reduce the mutual influence of noise color signals, resulting from the self correlation of the noise color signals in the plural patches of the same color.

2. A method according to Claim 1, wherein said plural patches of the same color are not arranged within a distance set in advance in the main and sub scanning directions.

3. A method according to Claim 1, wherein the kind and the number of patches included in said patch image are set according to the designation of the user.

4. A method according to Claim 1, further comprising steps of:

forming a block image including plural patches; and

arranging said block image so as to reduce the mutual influence of noise color signals, resulting from the self correlation of the noise color signals

in the plural patches of the same color.

5. A method according to Claim 4, further comprising steps of:

5   deriving, from the plural patches belonging to said block image, self correlation of the noise color signals in said block image based on the self correlation of the noise color signal in each of the plural patches;

10   deriving, from said block image, a high correlation area in which the arrangement of said block image is inhibited, based on said derived self correlation of the noise color signal and the positions of the same block image already arranged;

15   deriving an already arranged area in which the block image is arranged; and

       arranging said block image in an arrangeable area excluding said high correlation area in which the arrangement of the block image is inhibited and said

20   already arranged area.

6. A method according to Claim 5, further comprising steps of:

       discriminating whether said arrangeable area,

25 excluding said high correlation area and said already arranged area, is vacant;

       arranging said block image in the arrangeable

area in case the result of said discrimination
indicates that said arrangeable area is vacant; and

arranging said block image in an area
excluding said high correlation area and rearranging

5   the block image present in said already arranged area
in another area, in case the result of said
discrimination indicates that said arrangeable area is
not vacant.

10   7. A patch image preparation method for
preparing a patch image including plural patches of a
same color, wherein, for each patch color, the patches
are so arranged as to reduce the mutual influence of
the noise color signals resulting from self

15   correlation of the noise color signals in the same
patch color, in order that the noise color signal of
the same patch color can be approximated equivalently
as white noise.

20   8. A patch image preparation method for
preparing a patch image by arranging patches in
succession according to Claim 5, further comprising:

a step of deriving, for a patch, a high
correlation area in which the arrangement of said

25   patch is inhibited, from the self correlation of the
noise color signals of the same patch color and the
position of the already arranged patch of the same

color;

a step of deriving an already arranged area
in which a patch is already arranged; and

a step of arranging said patch in an
appropriate position in an arrangeable area excluding
said high correlation area and said already arranged
area.

9. A patch image preparation method for
preparing patch images over plural pages according to
Claim 8, wherein, in the step for deriving said
already arranged area, an already arranged area in
which a patch is already arranged is defined only in
case a patch is arranged in a same position over all
the pages.

10. A patch image preparation method comprising
steps of:

preparing a basic patch image for a color to
be used as a patch;

preparing a rotated image obtained by a
rotating operation on said basic patch image; and

arranging said rotated image in an
appropriate image position.

11. A computer readable recording medium storing
a program for a patch image preparation method for

forming a patch image including plural patches of a same color to be used for generating image processing data, the method being featured by that said plural patches of the same color are arranged so as to reduce

5   the mutual influence of noise color signals, resulting from the self correlation of the noise color signals in the plural patches of the same color.

12.   A computer readable recording medium storing
10   a program of a patch image preparation method for preparing a patch image including plural patches of a same color, the program being featured by a fact that, for each patch color, the patches are so arranged as to reduce the mutual influence of the noise color
15   signals resulting from self correlation of the noise color signals in the same patch color, in order that the noise color signal of the same patch color can be approximated equivalent as white noise.

20   13.   A computer readable recording medium storing a program for a patch image preparation method, the method comprising steps of:
        preparing a basic path image for a color to be used as a patch;
25   preparing a rotated image obtained by a rotating operation on said basic patch image; and
        arranging said rotated image in an appropriate image position.